

RENOLIT ONDEX



Rely on it.

RENOLIT ONDEX BIO

The control of
light !

www.renolit.com/ondex



RENOLIT ONDEX BIO

The control of light !

2

The range of RENOLIT ONDEX Bio sheets was designed for claddings and roof coverings of greenhouses and garden centres.

RENOLIT ONDEX BIO sheets are available in 5 colour shades from crystal to opaque. They are suitable for all types of cultures and are also used for storage buildings or technical rooms.

Renovation or new construction

3 ranges for all projects



RENOLIT ONDEX Bio 1

The economical range

Even with a lower thickness RENOLIT ONDEX Bio 1 sheets still have excellent optical and mechanical qualities.

This range was developed for projects where the specifications are less demanding and where the characteristics of polycarbonate sheets are considered to be sufficient.



RENOLIT ONDEX Bio 2

For all types of greenhouses

RENOLIT ONDEX Bio 2 sheets have been used for more than 40 years throughout the world. They adapt to all types of applications.



RENOLIT ONDEX Bio 3

The thickest range for extreme conditions

They are mainly meant for cyclone prone areas or at altitude.

NB: Product available upon request





PRODUCTS BENEFITS

Light transmission adapted to different types of sunshine for optimised crops

Increased mechanical resistance to

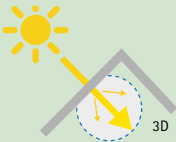
- + Hail
- + Wind
- + Snow falls

PRODUCT PERFORMANCE

- + Better chemical resistance than most plastic materials (polycarbonate, PET, polyester, ...)
- + Increased light in the greenhouse thanks to a reduced number of supports
- + Reinforced UV protection
- + Resistance to low temperatures
- + Cold bendability (min. radius 3 m)
- + Compatibility with many phytosanitary products and products used in agriculture

Light diffusion and transmission

Optical data

Colour shades (profile)	Light transmission % ①	Haze Diffusion % ①	Hemispherical Light Transmission % ②	Hortiscatter % ②	G value ③	Compatible crops ④
Crystal (TOG 77 x 20 - TO 76 x 18)	90	13 max.	76	4	0.83	Tomatoes - Peppers Melons - Early courgettes - CBD
Crystal DIFFU80 (TOG 77 x 20)	85	80 mini.	65	63	0.75	Flowers - Strawberries - Courgettes - Salads - Organic in high summer
Mixt DIFFU100 (TOG 77 x 20)	80	95 mini.	61	89	0.75	Flowers Orchids Anthuriums
Mixt 50 (TO 76 x 18)	45	95 mini.	34	81	0.50	Green plants Vanilla
White Opaque (TOG 77 x 20)	Completely opaque				0.08	Endives - Mushrooms Pre-shipment storage
	Percentage of direct solar radiation that passes vertically and is transmitted indoors 	Percentage of light that deviates from the incident beam by more than 2.5 degrees when passing through 	Incoming light beam despite the slope and the glares 	Ability to transform the beam into a wide beam limiting the shadows cast 	Total solar energy transmittance factor (0 - 1 Max) 	

The values given are nominal and may vary according to manufacturing tolerances. Technical specifications are subject to change without notice.

- ① determined with a haze-guard ② data from Wageningen UR light lab (The Netherlands) between 400 and 700 nm
 ③ determined with the Lambda 950 spectrometer between 200 and 2400 nm ④ non-exhaustive list

Profiles Installation

	Longitudinal overlap	Useful width (m)	Area of sheets for 1m ² of roofing/cladding (m ²)	Range	Maximum gap between purlins (m)
TOG 77 x 20	2 waves	1.008	1.12	Bio 3	1.5
				Bio 2	1.4
				Bio 1	1.3
TO 76 x 18 - 15 waves	2 waves	0.988	1.12	Bio 3	1.3
				Bio 2	1.2
				Bio 1	1.1
GRECA 72 x 5	2 waves	1.008	1.12	Bio 2	0.6

Ranges Characteristics

	Thickness (mm)	Weight (kg/m ²)	Hail warranty	Light transmission warranty	Minimum slope (%)
Range BIO 3	1.0	1.6	10 years	10 years	10
Range BIO 2	0.9	1.45	10 years	10 years	10
Range BIO 1	0.7	1.10	7 years	10 years	15

Colour shades

5 standard formulations available *



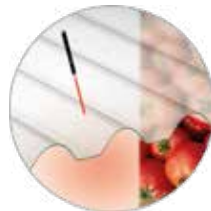
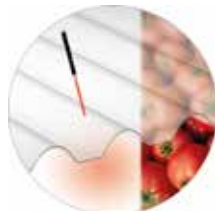
Crystal

Crystal 80

Mixt DIFFU 100

Mixt 50

White Opaque



* Colour shades available for some profiles, other profiles possible upon request
Laser test: Simulation of light transmission and diffusion.

Non-contractual illustration.

APPLICATIONS

- + Roofings
- + Claddings
- + Gables
- + Openings
- + Partitions



TYPES OF BUILDINGS

- + Greenhouses
- + Storage buildings
- + Garden centres
- + Photovoltaic
- + Technical rooms

WHAT IS PVC?

...POLYVINYL CHLORIDE

It has been produced industrially for over 50 years and is now the most widely used plastic material in the world in the construction industry. It is a thermoplastic resin that easily accepts the shape you want to give it. It is obtained by heating. **RENOLIT Ondex bi-stretches PVC to manufacture its sheets.**



PVC CONSISTS OF
57% SALT.



PHTHALATE AND
BISPHENOL A FREE



100% RECYCLED
DURING MANUFACTURING
PVC CAN BE RECYCLED UP TO
9 TIMES.



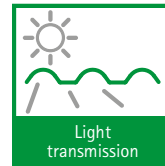
ECO-ORGANISATION BY
AND FOR THE PLAYERS
IN THE CONSTRUCTION
INDUSTRY

+ 8 GOOD REASONS FOR CHOOSING RENOLIT ONDEX



VERY HIGH SHOCK RESISTANCE

RENOLIT ONDEX sheets are certified 1200 Joules (50 kg bag falling from a height of 2.4 m)



LIGHT TRANSMISSION SUITABLE

for the application through a range of colour shades from crystal to opaque.



NO FIRE PROPAGATION AND NO DROPLETS

RENOLIT ONDEX sheets facilitate smoke evacuation.



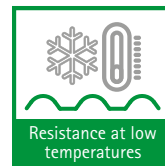
SINCE PVC IS A RECYCLABLE AND RECYCLED MATERIAL,

RENOLIT ONDEX sheets can be used as part of a Sustainable Development approach.



CAN BE USED ON CHEMICAL

or food processing industrial sites. Resistant to urban pollution and salt mist. No «stress cracking» phenomenon.



EVEN AT LOW TEMPERATURES,

RENOLIT ONDEX sheets retain their performance.

* List on request



HAIL RESISTANCE PERFORMANCE

Tested by a throw of marbles weighing 38 g, with a 40 mm diameter at 200 kph at a temperature of 0°C.



50 YEARS OF EXPERIENCE

Certificates throughout Europe in terms of installation, safety, fire or sustainable development.

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